

#2

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/817,607

DATE: 04/09/2001

TIME: 09:56:39

Input Set : A:\Dex-2011.app

Output Set: N:\CRF3\04092001\I817607.raw

ENTERED
see p.5

```

3 <110> APPLICANT: Yang, Fei
4     Piderit, Alejandra
5     Hu, Ping
6     Recipon, Herve
7     Macina, Roberto
9 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS OF DIAGNOSING, MONITORING,
10    STAGING, IMAGING AND TREATING COLON CANCER
12 <130> FILE REFERENCE: DEX-0201
C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/817,607
C--> 15 <141> CURRENT FILING DATE: 2001-03-26
17 <150> PRIOR APPLICATION NUMBER: 60/192,667
18 <151> PRIOR FILING DATE: 2000-03-28
20 <160> NUMBER OF SEQ ID NOS: 75
22 <170> SOFTWARE: PatentIn Ver. 2.1
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 523
26 <212> TYPE: DNA
27 <213> ORGANISM: Homo sapiens
29 <400> SEQUENCE: 1
30 accatgatta cgccaagctt ggtaccgagc tcggatccac tagtaacggc cgccagtgtg 60
31 ctggaattcg gcttagcgtg gtcgcggccg aggtacatca tatggtgtgc tagacatcag 120
32 caaatgcaaa gaagggtgagt aaataacctc agtagcacag tccataccat aatttgtgat 180
33 attctttaag atgagaactt taccataatc cttagcaac caaaatttaa aatatatcat 240
34 aatttgtgat attctttaaa atgagaactt taccataatc cttagcaac caaaatttaa 300
35 aattaaagta agaaagtaat tagggcagaa gaaagaatgg tggcagaaaa ttttagtgct 360
36 gattttgtat ttgggaaga tcccacttgt gtttcagtat tacaaaaatt agttaaacc 420
37 acaccagtat ttctctgtgg ctgcttttag atttaggtg aaatgaaaat aattccgaga 480
38 acacattaaa catcctgtta ttcctctgtc ctaacttttt tca 523
41 <210> SEQ ID NO: 2
42 <211> LENGTH: 528
43 <212> TYPE: DNA
44 <213> ORGANISM: Homo sapiens
46 <400> SEQUENCE: 2
47 caaaaattat tcccaaaacc tttagtcaaa atttcaagta aaataattct gatgtgttta 60
48 tatggtgcct ttattgactc ttaacaatac agtatgtgca tcaactgcaa tcacagcaca 120
49 ttctcataat gaataaaaat taatttgttt gtcaccccca attagaatta gaaccaaatt 180
50 ttatttaatg agtgtaattt acccaagcaa ttgaggtag tcattcagct caagttttaa 240
51 aactcacaca gaccactttc tgcctgcct acttcataat acttttgagt tctatccaaa 300
52 caggtcccat gactctattt occacacttg ccttagtcac totaacttca tgacttgatt 360
53 tgtacatatt acttggaat tccatgtcac tcatgatccg gctatctaca agagagattc 420
54 ctcaattgta ggctagtgat acttcaaact ctctttaatc tgacaataaa ttattaaaac 480
55 aagtagagct ggtgtgttc tgtgtgaaca taagtagaaa cacaatgt 528
58 <210> SEQ ID NO: 3
59 <211> LENGTH: 478
60 <212> TYPE: DNA
61 <213> ORGANISM: Homo sapiens
63 <400> SEQUENCE: 3

```

RAW SEQUENCE LISTING

DATE: 04/09/2001

PATENT APPLICATION: US/09/817,607

TIME: 09:56:39

Input Set : A:\Dex-2011.app

Output Set: N:\CRF3\04092001\I817607.raw

```

64 ggagagatac aacatgttac tgcagtcac actgcaataa gattgaataa gaaaaaggaa 60
65 cacaacaaaa agtttctgta gaaatggtct catatgaaaa tctttttgat aacaatattt 120
66 ggcacattat tcttctttaa aatttacacc ttaatagact aataaattat agtctctgaa 180
67 ttcaagggtc gtgcaaaaat tagaaaacag atgcttgagt agtaagtga aggagcacta 240
68 ctactcacta atttgacctt gaccaagttt ttgaacattt atgaacccta ataccctcat 300
69 ctctaaattg gaactaattt attttacaga aaataaaata ttttctgtaa agcataaaac 360
70 tagcaaatgc atttaaaac attatttacc ttctctttg ggcattggcat ttactgggt 420
71 actactacca gcccttgaaa ttgacagtat gacaaattaa gtaacaaata cgaaaaga 478
74 <210> SEQ ID NO: 4
75 <211> LENGTH: 495
76 <212> TYPE: DNA
77 <213> ORGANISM: Homo sapiens
79 <400> SEQUENCE: 4
80 acatgacaca ttgaaagaaa ataatttatt attgaatgac attttaaaag tcttacctaa 60
81 acagacagat aatgtattg agaacttgac atgctgattc taaaacttcc acagatgaac 120
82 aaaagtccaa aaatagccaa aatattcttg aagaaaagaa gctggtggta tataccacc 180
83 tgattaatat ttattataga actataaaaa tgaaaatatt atggaactga tgcattgata 240
84 aatagcaaat atggtcccat aaaatggtgg catgatgttg cagactcaag tgcataccga 300
85 aattttatat atgacatttc agattctaag aaaagagag gaattattca atgtatagtt 360
86 tggggaattg attattcaaa taaaaaagga ttatgaatgt aatttcacag tgaacttcaa 420
87 agcagttgtt tattttgagg gttagaagaa gagttttttg gtcaatgtgt agttgttttt 480
88 aaatcaggta cctgc 495
91 <210> SEQ ID NO: 5
92 <211> LENGTH: 528
93 <212> TYPE: DNA
94 <213> ORGANISM: Homo sapiens
96 <400> SEQUENCE: 5
97 actccagcct gggcaacaaa agcaaaactcc atctcaaaaa aaatcaatta aaattaattg 60
98 agatattatg caaagtatgg aataataaaa ttatttcaaa aactaataac atgatatatt 120
99 catttgtaa tcttctttaa attaagagta ttgtgtccta aaaaaccaa cattcagtag 180
100 ttcaaatatg taagtgtgta acaagtataa aaagaattaa taaataagag ctttcatttg 240
101 ttaaatatat gtaatatatt tttatatata tatatcttag ctcaaaatga tgcacatta 300
102 ggcgaaaata tttaaaaata attgatattt aactataagt cattatgttg aacctaatgg 360
103 atttccaatg aaaatagata gattttctga atttaccac tgttttgtgt aaagaatttt 420
104 atacatttct ctacaattcg tattgatttg atgttttata gtttacaaga ttatctaaca 480
105 tgcatttctc tttaacctca aaagacgaca ataaaataag tatctggg 528
108 <210> SEQ ID NO: 6
109 <211> LENGTH: 455
110 <212> TYPE: DNA
111 <213> ORGANISM: Homo sapiens
113 <400> SEQUENCE: 6
114 ttttggcaag ctgaaaacag ggacctgagg ctttctttat atacaaatgt ctatggatga 60
115 ttagattaat aacacaatat agttcttagt tttaaatacc tatagtttat tccaggaact 120
116 ctttacttat ataacctact gttgtaacta atcctgggac acaatgtaag ggcttcgtcc 180
117 tcttgaacaa ctgctgatac tagaggaaa tagccatttc ctttattcac tggctctgat 240
118 gtgtgtggcc attcttcacc acagtcatat tatccacttt gaatccaagg tgtggtggat 300
119 tattctattg agaattctaa ttctctgggt gtggatttta cactggcttt tatgttgctc 360
120 atttagtgtt ggtgtatgga gccctgtgta ttggaatggc tgcgtggtgc tcacttatgg 420
121 gagctttgtg gccctgtgga gctggccccc ggggg 455

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/817,607

DATE: 04/09/2001

TIME: 09:56:39

Input Set : A:\Dex-2011.app

Output Set: N:\CRF3\04092001\I817607.raw

```

124 <210> SEQ ID NO: 7
125 <211> LENGTH: 489
126 <212> TYPE: DNA
127 <213> ORGANISM: Homo sapiens
129 <400> SEQUENCE: 7
130 acagtttagt aggatataa atattcataa tgttgtatag ccatccattt gcagaactag 60
131 acttccagaa ctagaaaaat tctaaatatt tcatgttagt agaattatit tataattggc 120
132 ctggaggtgt ctggcttatt tcacttagca tcatattttc aaggcccatc tacattgtag 180
133 catatatcaa catttcattc tttttatggc taaataatac ttcatatat gtatagacca 240
134 ccttttgttt atccatttat ctctcttcta ttccaaatta tgctataagt aattgaaaat 300
135 gtaactacta attattggta atttaaatag aagatttatt gattaaatag taaaccatat 360
136 ggtatagagt ctacatatgg atagaatgtg gatgatgaag atcctttccc ataccctttt 420
137 ttctataatc cggagaatga gatattcaat ctggtatttg aaattcttag tcataatggt 480
138 ggtaacctt
489
141 <210> SEQ ID NO: 8
142 <211> LENGTH: 545
143 <212> TYPE: DNA
144 <213> ORGANISM: Homo sapiens
146 <400> SEQUENCE: 8
147 acagagaaaa gtgatgaaaa gttctaacat tttaaaacat attttctcaa aaatttgttg 60
148 tataatagtc ctctcttgat cactcattcc tctgactgta tcttagaatc tcctcccgac 120
149 aagaagtatc tatttacttt ataccgattg gggtttttgc aacatgcaac caagagagtc 180
150 ctaactcata catcattcaa gttagtatgt ttgtattatg atcctgctta aataccatgc 240
151 acatgaaata aaaccttcat taactgcaa tgaaggtttt atttcaactg ctattccacg 300
152 tgcatatgag tatagacata taaaaataaa atggtaggct tttgataagt atttttaaat 360
153 accaatttct accaactaat ctttgaaatg tgcoacagtt gacatgaaca gaataggata 420
154 tattatgtat taaaatatct ttacaaaatg gatttgctgc tcttggtcca cttctgctca 480
155 tggttttgtc tcaatactca aatcaacagc aagtttaaca aggacaaatt aagtgtacct 540
156 tccgg
545
159 <210> SEQ ID NO: 9
160 <211> LENGTH: 220
161 <212> TYPE: DNA
162 <213> ORGANISM: Homo sapiens
164 <400> SEQUENCE: 9
165 acacacagaa atacacatgt atagtctca atgtaaaata ttttctaac agtgtttcaa 60
166 aaattttttt aaagtgtgaa accagtggaa tatttagatc aatctgattt tatagcttac 120
167 caaaagggtg taaatattta cacttgatac atttctgata gaaatgagtt tgatttttac 180
168 caattttaat agtcaactta cgcactaagg ctttaaaaat
220
171 <210> SEQ ID NO: 10
172 <211> LENGTH: 484
173 <212> TYPE: DNA
174 <213> ORGANISM: Homo sapiens
176 <400> SEQUENCE: 10
177 actttctcag agttcaattt gaggtggata agaccatagt aattcaatac agcaagtgtc 60
178 actgtaaggg aagccctcag gtggtctccc taattatttc atactaatta gctcagatag 120
179 taaaagggtc tgttttatta cttgatgca agtggtgat gctttgggac agttaattgt 180
180 gctacatttc atttttttaa tgaatgtgc attacctgga tatagctttt tattgtgctt 240
181 taatattgtc aataggtaaa acattacagg aaaaaagatt atttttcaaa tttcttagca 300
182 ttgatagcta aattgcaatt tactttctat tttttaata ttgaacttca ttgatcaaac 360

```

RAW SEQUENCE LISTING

DATE: 04/09/2001

PATENT APPLICATION: US/09/817,607

TIME: 09:56:39

Input Set : A:\Dex-2011.app

Output Set: N:\CRF3\04092001\I817607.raw

```

183 actgttcttg tatttagctt cacattgtta aaaccagaga caaaggccac ataaacggaa 420
184 acttttagcga gaaaacatta gctgtgtttt accttacatg gtgaatatgt atttaatttt 480
185 ctct 484
188 <210> SEQ ID NO: 11
189 <211> LENGTH: 350
190 <212> TYPE: DNA
191 <213> ORGANISM: Homo sapiens
193 <400> SEQUENCE: 11
194 gaagatacaa actaagggtca ttaagttttc ttttaatttat aatttatatt aacctattca 60
195 ttgaaaagga ttgtagattt tggattataa gcaaaacagg caaagaccat taaaaacaaa 120
196 gacagaaaat gagcataaat cacttgagaa ataatgagca gaatggggga atgggaagaa 180
197 atctttatac cagtaatctg aggcaagata gtttctgtgt ttgaacatta aatttagctc 240
198 tgagcttctt ggcaagcaag agaaaaaagg aaacagggtg acttttatag ttattgtcca 300
199 gtaaagaaaag ctttttcaat ttttcagaag agagaaactt tttctgagtc 350
202 <210> SEQ ID NO: 12
203 <211> LENGTH: 143
204 <212> TYPE: DNA
205 <213> ORGANISM: Homo sapiens
207 <400> SEQUENCE: 12
208 cttgtaggga gtgcctgggt aagaggaggt aaaaggctat ctataatttc atttctaaag 60
209 agctaactag gaagtgggga gaaggagtaa agagaacaga agagggaaaa aaaaattaaa 120
210 atattttctt aaaaaatggg ggt 143
213 <210> SEQ ID NO: 13
214 <211> LENGTH: 187
215 <212> TYPE: DNA
216 <213> ORGANISM: Homo sapiens
218 <400> SEQUENCE: 13
219 acagtaaaat gcacaaatct tctgcagaca gaccagagaa ttttgataaa tttgtatgct 60
220 tgtttgacaa tcatccatat taagatatag aatactccca tcgctccaga gtgttccctt 120
221 tctgttccct tcagtcagtc attctcttac tctgcaatca ctgttggttt cggtcactat 180
222 aaattag 187
225 <210> SEQ ID NO: 14
226 <211> LENGTH: 438
227 <212> TYPE: DNA
228 <213> ORGANISM: Homo sapiens
230 <400> SEQUENCE: 14
231 acagtggggg aaagatgact aaaataaatt aatcgtgaca tctatctcac accatacaga 60
232 aaaaataatt ccagatgggg actagagacc tacaggtaaa aggttaaaaa taaataatgc 120
233 ttttagagca aaacattgaa acatatattc atgatattaa ggtgggaaaa gacttcacaa 180
234 acagtttttt aaaaagtggg aacggcaaag ggaaaacttg taaaactgga caatatcaaa 240
235 attggttaagt tctatatcaa cagacactaa gagatttcaa aagcaactca cagtaaagaa 300
236 tacactctac atatatataa tgtaaatata cacatgaata caaacatcta catattgata 360
237 taaaataaat atttatgtca aaaaatatga agaattttta caaatcatta agaaaacaaa 420
238 cccaacacaa gacacttc 438
241 <210> SEQ ID NO: 15
242 <211> LENGTH: 151
243 <212> TYPE: DNA
244 <213> ORGANISM: Homo sapiens
246 <400> SEQUENCE: 15

```

RAW SEQUENCE LISTING

DATE: 04/09/2001

PATENT APPLICATION: US/09/817,607

TIME: 09:56:39

Input Set : A:\Dex-2011.app

Output Set: N:\CRF3\04092001\I817607.raw

```

247 gataagcatt ttttcacata tttatcagcc atttatattt ctttctctgt aaactgacta 60
248 ttcatattat tgggtccatt gtctttctgc agtttttcac acctacaaac aaacccttac 120
249 cattattaac tcccaccac cacaaggcac c                                     151
252 <210> SEQ ID NO: 16
253 <211> LENGTH: 600
254 <212> TYPE: DNA
255 <213> ORGANISM: Homo sapiens
257 <400> SEQUENCE: 16
258 cttttaaatt aattttaaat aatatcttta attttggcaa aaggaactgt tttcacaaatt 60
259 gcctttcagg ttaaattaag aaatctctaa agtctctcta ttttaattta catataaaat 120
260 gtcatttgca ttaactctgat gattttaaac tacacatttg gcccaacaata tctaattaat 180
261 ttgacaagag agttatggaa ataataaaaa ttactttgaa atttcaaggg ccacttcatt 240
262 ttttaaatgt cttattaat atatttttgt aataaaagaa atcattcaga agaaatgtaa 300
263 cagtatttta atttccaagt aataggtatg ctgaatgtta atttgccta catttggcat 360
264 ctacaggaga caaaagcatt gtattctcaa tgccaaaaat aagaaattca ttaatacaac 420
265 ctgaaaaata caataaaatc aaagtttttt ggcagagaat acaagatgt gagttgaaa 480
266 ttgagtgtct tcatttaaaa aaaactagcc ggcataagac cattattttt agttttctg 540
267 gcatttcaat agagagacca gtgaagagta ataattttta tgaagttcag catcttagtt 600
270 <210> SEQ ID NO: 17
271 <211> LENGTH: 347
272 <212> TYPE: DNA
273 <213> ORGANISM: Homo sapiens
275 <400> SEQUENCE: 17
276 aaatcctagt agaactttt ataaggaatt ttacatatcg tggatttaag cacacatctt 60
277 aaatctgcat gtaataaac catagtttat agtttaatag aaattttctg acttgttttc 120
278 acttattttt aacttggtgt tgctgtcaca gaaatagtta caattttgct gtattacatt 180
279 tgacttacct taacgctatg ctaacaaaa acacacacca gaaactggaa cagaagtaac 240
280 tgaaaagtca agtttagact catcttggag aaagagtga aataaatga gtgaatgaat 300
281 aggatattga gttcacttaa aggcaacaga taaattatag cgggtttt                                     347
284 <210> SEQ ID NO: 18
285 <211> LENGTH: 508
286 <212> TYPE: DNA
287 <213> ORGANISM: Homo sapiens
289 <400> SEQUENCE: 18
290 gcgtggtcgc ggcagggtta cactatggaa agggaaaata atttttttta ctatgacata 60
291 atcaagagaa attgaaagct actggtttta taagttttca tttcaactg attctttgca 120
292 gctatttcct acaagaaca aatgttgata tttttaatt attcattcat tgtctctctt 180
293 ttctatccat attatgtatt tttagggcca ttttcccat cctcccaccc caggcaatac 240
294 acacagatag aaaaatgctt cactaggaat ggtcttcct atgcccact ttctcattaa 300
295 tattaaagca gtttcagcca acatagtagt tatttatttc agctcttaga gttcttctt 360
296 ccattggtta tggccctaaa tcttttctta tctgatgaaa tttccctgaa caaaacatcg 420
297 atgtttctaa ttgatcacc attatatact gatttctac caggtagtat aggctgtatt 480
298 tgttaataaa ataaatgagt aaagacgt                                     508
301 <210> SEQ ID NO: 19
302 <211> LENGTH: 570
303 <212> TYPE: DNA
304 <213> ORGANISM: Homo sapiens
306 <400> SEQUENCE: 19
307 acaaatataa atagataaaa cattaaaggt gctactactc aaaacacaca gggaataaaa 60

```

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/817,607

DATE: 04/09/2001

TIME: 09:56:40

Input Set : A:\Dex-2011.app

Output Set: N:\CRF3\04092001\I817607.raw

L:14 M:270 C: Current Application Number differs, Replaced Application Number
L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:657 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:39
L:657 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39
L:674 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:40
L:674 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40
L:867 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:51
L:867 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51
L:974 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:57
L:974 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57